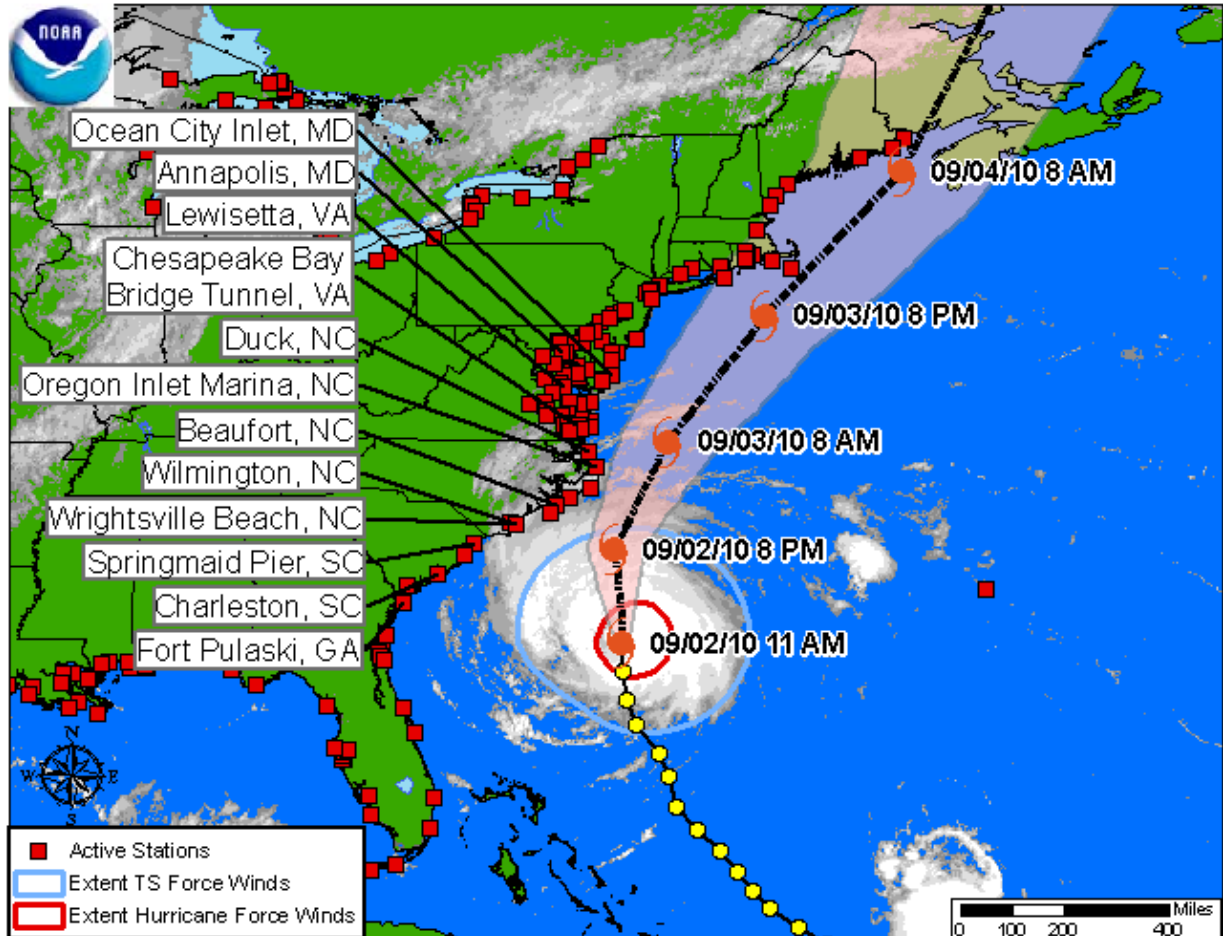




Hurricane EARL QuickLook
Posted: 11:30 EDT 09/02/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/02/2010 12:00 EDT, water levels along the eastern U.S. Coastline from Georgia to South Carolina are rising and range between 0.1 to 1.0 feet above predicted levels. Water levels in North Carolina, Virginia, and Maryland are at or near predicted levels. Winds are increasing across the area and have a range of 8 to 22 knots, with gusts upto 26 knots. Barometric pressure is falling across the region from Virginia South. It is steady in Maryland.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

FORT PULASKI, GA Next predicted high tides are 7.43 ft (2.26 m) at 09/02/2010 15:03 EDT and 6.35 ft (1.94 m) at 09/03/2010 03:27 EDT.

CHARLESTON, SC Next predicted high tides are 5.75 ft (1.75 m) at 09/02/2010 14:48 EDT and 4.78 ft (1.46 m) at 09/03/2010 03:10 EDT.

SPRINGMAID PIER, SC Next predicted high tides are 5.49 ft (1.67 m) at 09/02/2010 14:23 EDT and 4.55 ft (1.39 m) at 09/03/2010 02:53 EDT.

WRIGHTSVILLE BEACH, NC Next predicted high tides are 4.36 ft (1.33 m) at 09/02/2010 14:12 EDT and 3.45 ft (1.05 m) at 09/03/2010 02:35 EDT.

WILMINGTON, NC Next predicted high tides are 4.49 ft (1.37 m) at 09/02/2010 16:11 EDT and 3.93 ft (1.20 m) at 09/03/2010 04:50 EDT.

BEAUFORT, NC Next predicted high tides are 3.47 ft (1.06 m) at 09/02/2010 14:51 EDT and 2.80 ft (0.85 m) at 09/03/2010 03:06 EDT.

OREGON INLET MARINA, NC Next predicted high tides are 1.29 ft (0.39 m) at 09/02/2010 14:52 EDT and 1.08 ft (0.33 m) at 09/03/2010 03:13 EDT.

DUCK, NC Next predicted high tides are 3.70 ft (1.13 m) at 09/02/2010 14:18 EDT and 2.84 ft (0.87 m) at 09/03/2010 02:43 EDT.

CHESAPEAKE BAY BRIDGE TUNNEL, VA Next predicted high tides are 2.90 ft (0.88 m) at 09/02/2010 15:04 EDT and 2.31 ft (0.70 m) at 09/03/2010 03:29 EDT.

LEWISSETTA, VA Next predicted high tides are 1.60 ft (0.49 m) at 09/02/2010 20:44 EDT and 1.44 ft (0.44 m) at 09/03/2010 08:54 EDT.

ANNAPOLIS, MD Next predicted high tides are 1.69 ft (0.52 m) at 09/03/2010 01:12 EDT and 1.15 ft (0.35 m) at 09/03/2010 12:16 EDT.

OCEAN CITY INLET, MD Next predicted high tides are 2.30 ft (0.70 m) at 09/02/2010 15:14 EDT and 1.82 ft (0.55 m) at 09/03/2010 03:16 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst:MPM

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 33

1100 AM EDT THU SEP 02 2010

...DANGEROUS HURRICANE EARL HEADING FOR THE OUTER BANKS OF NORTH CAROLINA...HURRICANE WARNINGS ISSUED FOR PORTIONS OF MASSACHUSETTS...

AT 1100 AM EDT. THE EYE OF HURRICANE EARL WAS LOCATED ABOUT 300 MI S OF CAPE HATTERAS NORTH CAROLINA, ABOUT 765 MI SSW OF NANTUCKET MASSACHUSETTS NEAR LATITUDE 30.9 NORTH...LONGITUDE 74.8 WEST.

WATCHES AND WARNINGS

A HURRICANE WARNING IS IN EFFECT FOR...

- * BOGUE INLET NORTH CAROLINA NORTHEASTWARD TO THE NORTH CAROLINA/VIRGINIA BORDER INCLUDING THE PAMLICO AND ALBEMARLE SOUNDS.**
- * WESTPORT MASSACHUSETTS EASTWARD AROUND CAPE COD TO HULL INCLUDING MARTHAS VINEYARD AND NANTUCKET ISLAND**

A HURRICANE WATCH IS IN EFFECT FOR...

- * NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO CAPE HENLOPEN DELAWARE.**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * CAPE FEAR TO WEST OF BOGUE INLET NORTH CAROLINA.**
- * NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO SANDY HOOK NEW JERSEY...INCLUDING DELAWARE BAY SOUTH OF SLAUGHTER BEACH AND THE CHESAPEAKE BAY SOUTH OF NEW POINT COMFORT.**
- * THE EASTERN PORTION OF LONG ISLAND NEW YORK FROM FIRE ISLAND INLET TO PORT JEFFERSON HARBOR.**
- * NEW HAVEN CONNECTICUT TO WEST OF WESTPORT MASSACHUSETTS... INCLUDING BLOCK ISLAND.**

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- * NORTH OF HULL MASSACHUSETTS TO EASTPORT MAINE.**
- * THE COAST OF NOVA SCOTIA FROM PORT MAITLAND TO MEDWAY HARBOUR.**
- * THE COAST OF LONG ISLAND WEST OF FIRE ISLAND INLET AND PORT JEFFERSON HARBOR.**

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 AM EDT. THE EYE OF HURRICANE EARL WAS LOCATED ABOUT 300 MI S OF CAPE HATTERAS NORTH CAROLINA, ABOUT 765 MI SSW OF NANTUCKET

MASSACHUSETTS NEAR LATITUDE 30.9 NORTH...LONGITUDE 74.8 WEST. EARL IS NOW MOVING TOWARD THE NORTH NEAR 18 MPH...30 KM/HR. A TURN TOWARD THE NORTH-NORTHEAST WITH AN INCREASE IN FORWARD SPEED IS EXPECTED ON FRIDAY. ON THE FORECAST TRACK...THE CENTER OF EARL WILL PASS NEAR THE NORTH CAROLINA OUTER BANKS TONIGHT...AND APPROACH SOUTHEASTERN NEW ENGLAND FRIDAY NIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 140 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY FOUR HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. NO SIGNIFICANT CHANGE IN STRENGTH IS EXPECTED TODAY...BUT GRADUAL WEAKENING SHOULD BEGIN ON FRIDAY.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 90 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 230 MILES.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 932 MB...27.52 INCHES.

HAZARDS AFFECTING LAND

WINDS...TROPICAL-STORM-FORCE WINDS ARE EXPECTED TO REACH THE NORTH CAROLINA COAST WITHIN THE WARNING AREA BY THIS AFTERNOON. EVEN IF THE CENTER OF EARL REMAINS OFFSHORE...HURRICANE FORCE WINDS ARE EXPECTED TO OCCUR IN THE OUTER BANKS BY TONIGHT. TROPICAL-STORM- FORCE WINDS WILL LIKELY REACH THE COAST FROM VIRGINIA NORTHWARD TO NEW JERSEY TONIGHT OR EARLY FRIDAY.

STORM SURGE...A DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 3 TO 5 FEET ABOVE GROUND LEVEL WITHIN BOTH HURRICANE WARNING AREAS AND THE LOWER CHESAPEAKE BAY. ELSEWHERE WITHIN THE TROPICAL STORM WARNING AREA...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE GROUND LEVEL. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DESTRUCTIVE WAVES.

SURF...LARGE SWELLS FROM EARL WILL CONTINUE TO AFFECT THE BAHAMAS AND THE EAST COAST OF THE UNITED STATES THROUGH FRIDAY. THESE SWELLS WILL LIKELY CAUSE DANGEROUS SURF CONDITIONS AND RIP CURRENTS.

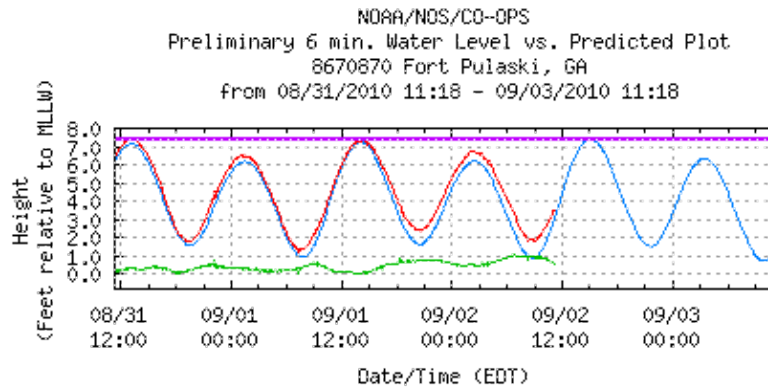
FORECASTER AVILA

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Fort Pulaski - Barometric](#), [Fort Pulaski - Air/Water Temp](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Springmaid Pier - Water Level](#), [Springmaid Pier](#)

- Winds, Springmaid Pier - Barometric, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Wrightsville Beach - Air/Water Temp, Wilmington - Water Level, Wilmington - Barometric, Wilmington - Air/Water Temp, Beaufort - Water Level, Beaufort - Winds, Beaufort - Barometric, Beaufort - Air/Water Temp, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Oregon Inlet Marina - Air/Water Temp, Duck - Water Level, Duck - Winds, Duck - Barometric, Duck - Air/Water Temp, Chesapeake Bay Bridge Tunnel - Water Level, Chesapeake Bay Bridge Tunnel - Winds, Chesapeake Bay Bridge Tunnel - Barometric, Chesapeake Bay Bridge Tunnel - Air/Water Temp, Lewisetta - Water Level, Lewisetta - Winds, Lewisetta - Barometric, Lewisetta - Air/Water Temp, Annapolis - Water Level, Annapolis - Barometric, Annapolis - Air/Water Temp, Ocean City Inlet - Water Level, Ocean City Inlet - Winds, Ocean City Inlet - Barometric, Ocean City Inlet - Air/Water Temp,

Fort Pulaski, GA - [Return to List](#)

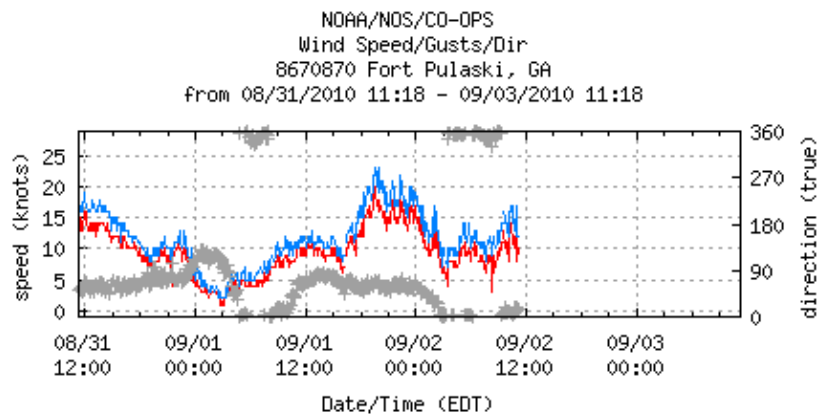


Last Observed Sample: 09/02/2010 11:06 (EDT)

Relative to **MLLW**: **Observed: 3.55 ft. Predicted: 2.98 ft. Residual: 0.57 ft.**

Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above **MHHW**

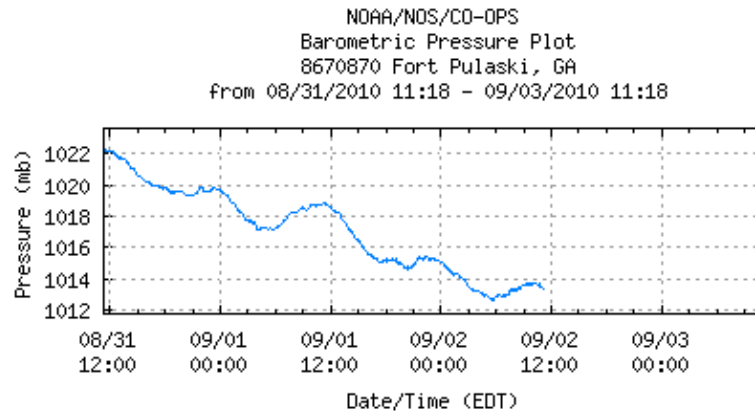
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Wind Speed: 10 knots Gusts: 12 knots Direction: 014° T

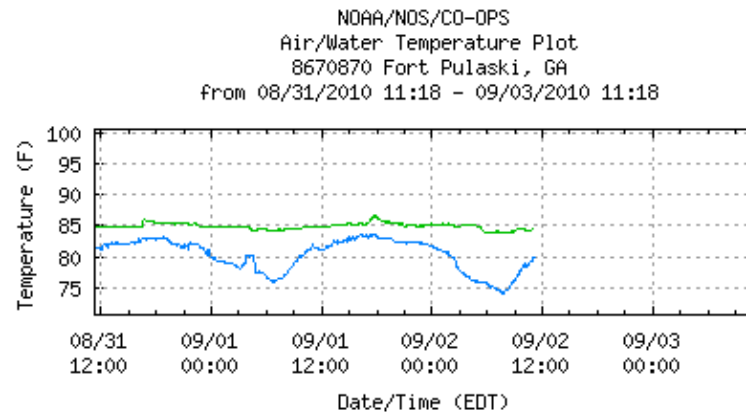
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Barometric Pressure: 1013.4 mb

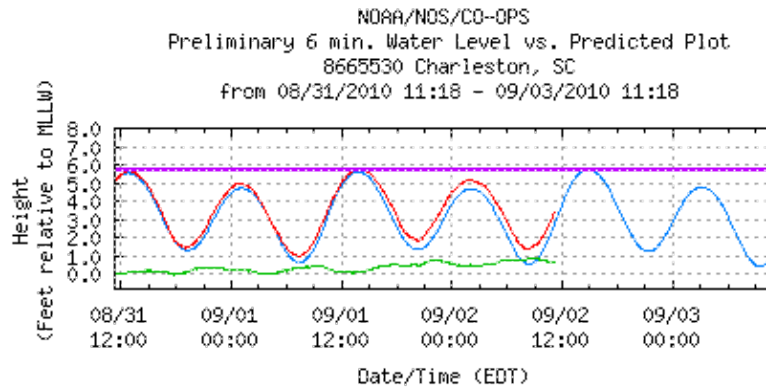
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Water Temperature: n/a Air Temperature: 79.7° F

Charleston, SC - [Return to List](#)

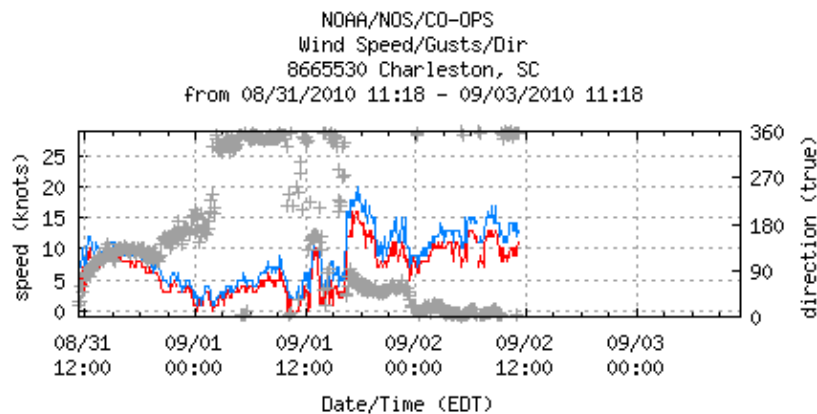


Last Observed Sample: 09/02/2010 11:06 (EDT)

Relative to **MLLW**: **Observed: 3.36 ft. Predicted: 2.69 ft. Residual: 0.67 ft.**

Historical Maximum Water Level: Sep 21 1989, 6.76 ft. above **MHHW**

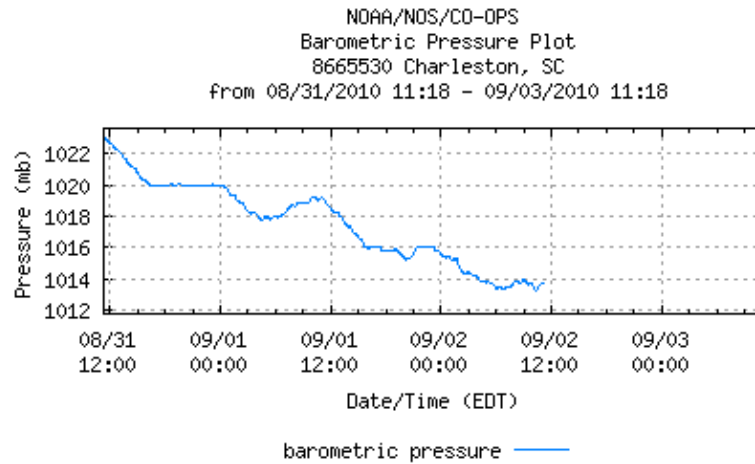
Charleston, SC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Wind Speed: 11 knots Gusts: 13 knots Direction: 355° T

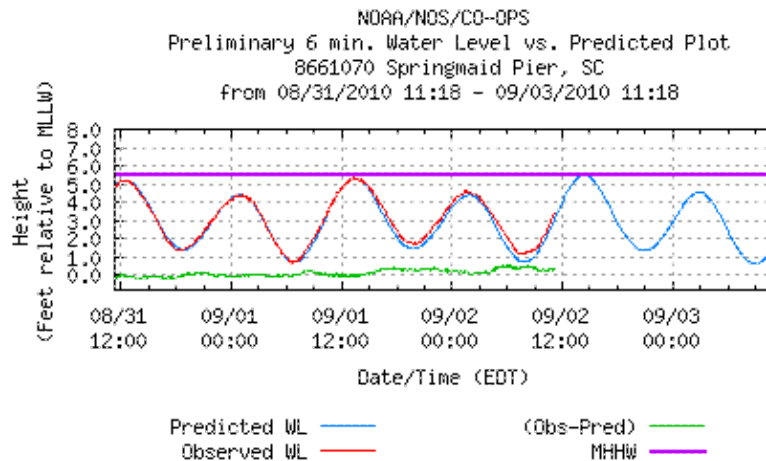
Charleston, SC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Barometric Pressure: 1013.7 mb

Springmaid Pier, SC - [Return to List](#)

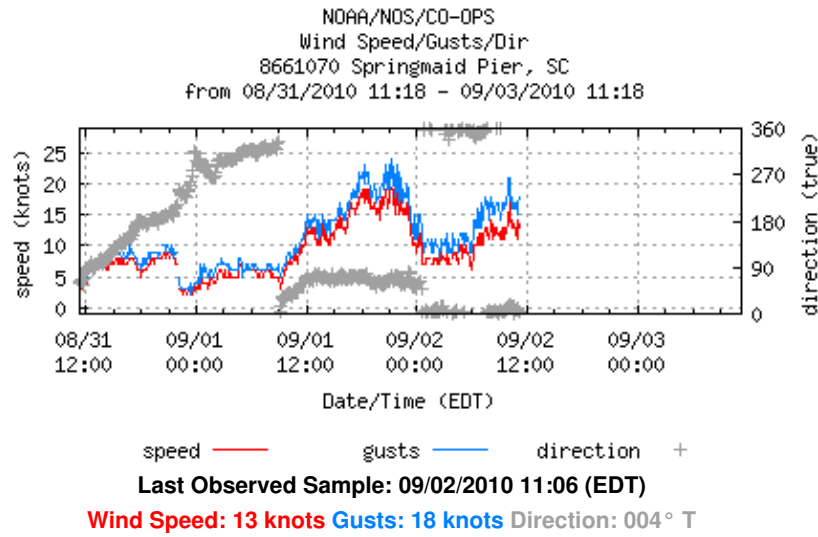


Last Observed Sample: 09/02/2010 11:06 (EDT)

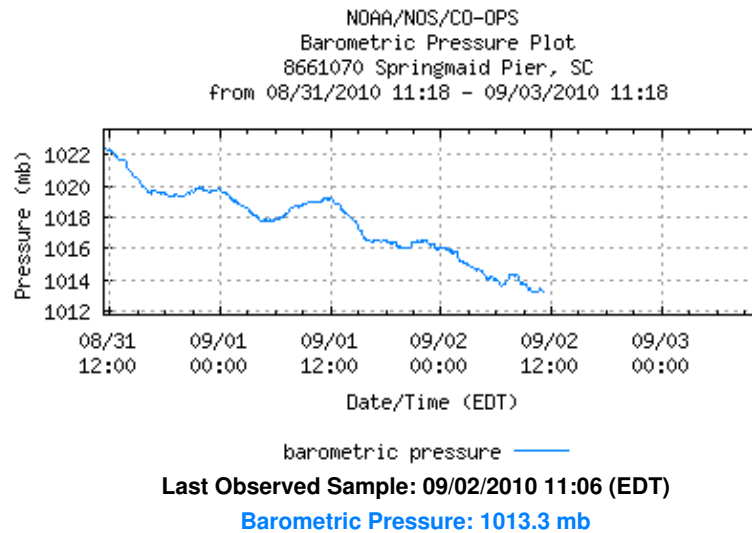
Relative to **MLLW**: **Observed: 3.36 ft.** **Predicted: 3.03 ft.** **Residual: 0.33 ft.**

Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above **MHHW**

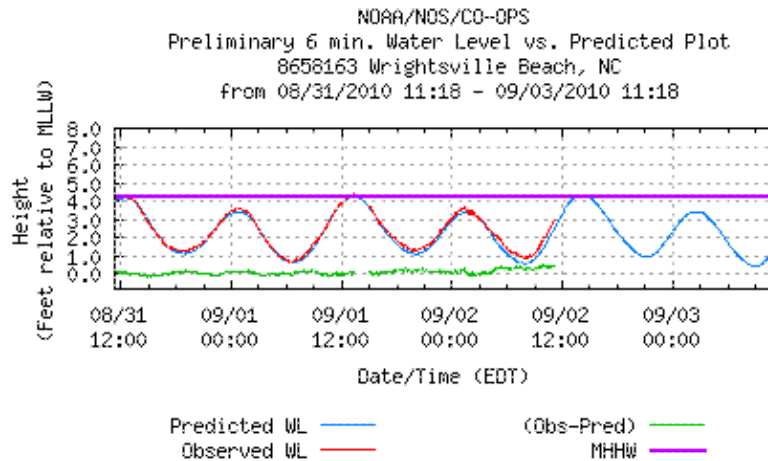
Springmaid Pier, SC - [Return to List](#)



Springmaid Pier, SC - [Return to List](#)



Wrightsville Beach, NC - [Return to List](#)

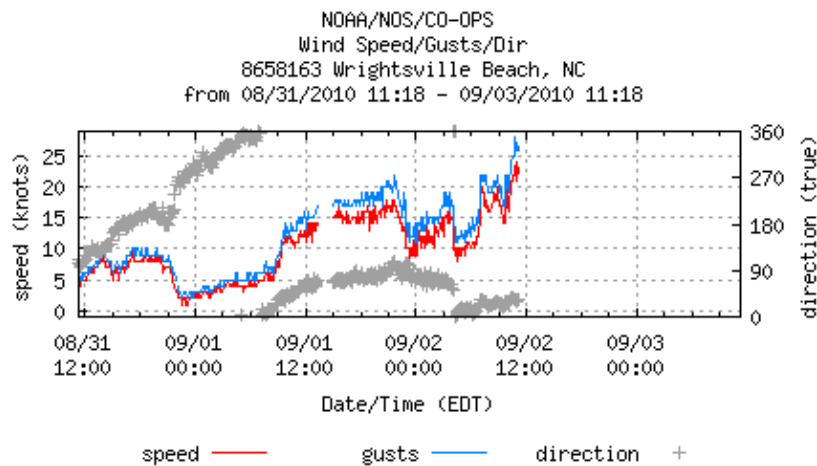


Last Observed Sample: 09/02/2010 11:06 (EDT)

Relative to **MLLW**: **Observed: 2.98 ft. Predicted: 2.49 ft. Residual: 0.49 ft.**

Historical Maximum Water Level: Sep 25 2008, 2.78 ft. above **MHHW**

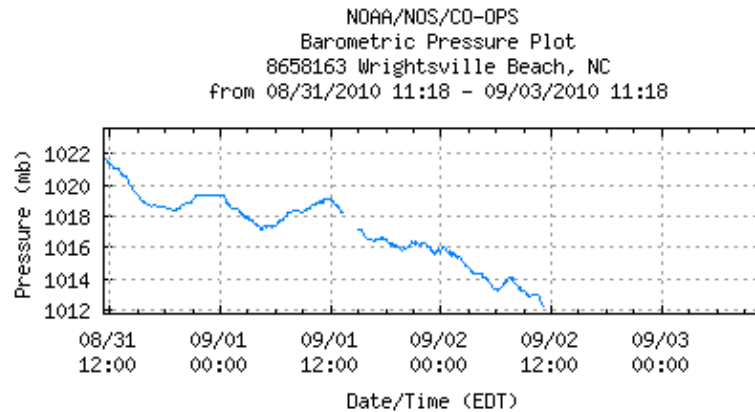
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Wind Speed: 23 knots Gusts: 26 knots Direction: 033° T

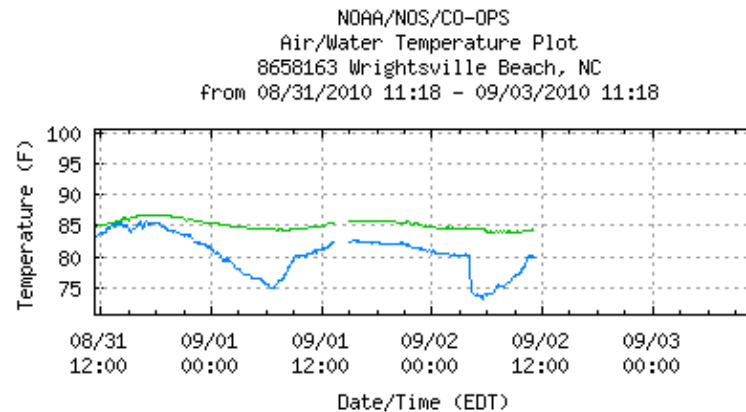
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Barometric Pressure: 1012.3 mb

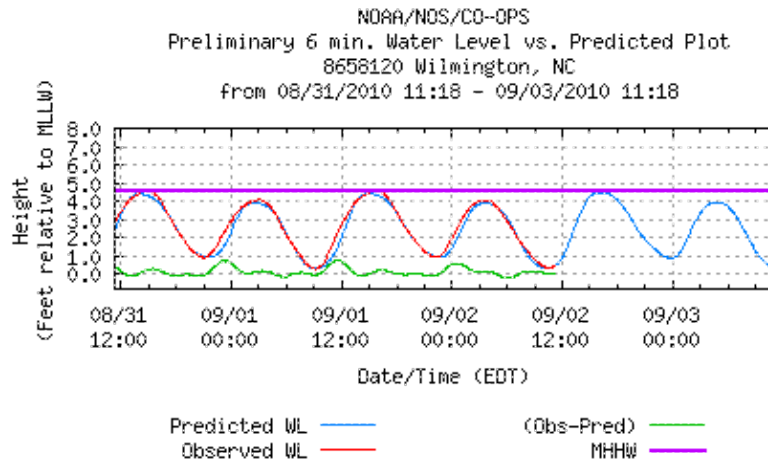
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Water Temperature: n/a Air Temperature: 79.9° F

Wilmington, NC - [Return to List](#)

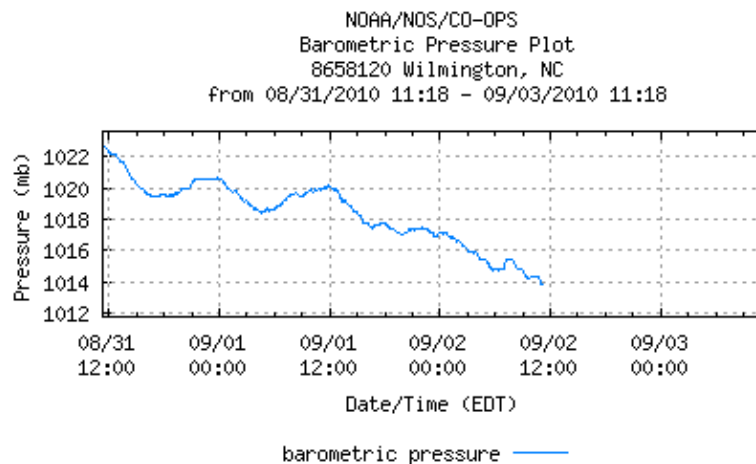


Last Observed Sample: 09/02/2010 11:06 (EDT)

Relative to **MLLW**: **Observed: 0.49 ft. Predicted: 0.47 ft. Residual: 0.02 ft.**

Historical Maximum Water Level: Oct 15 1954, 3.47 ft. above **MHHW**

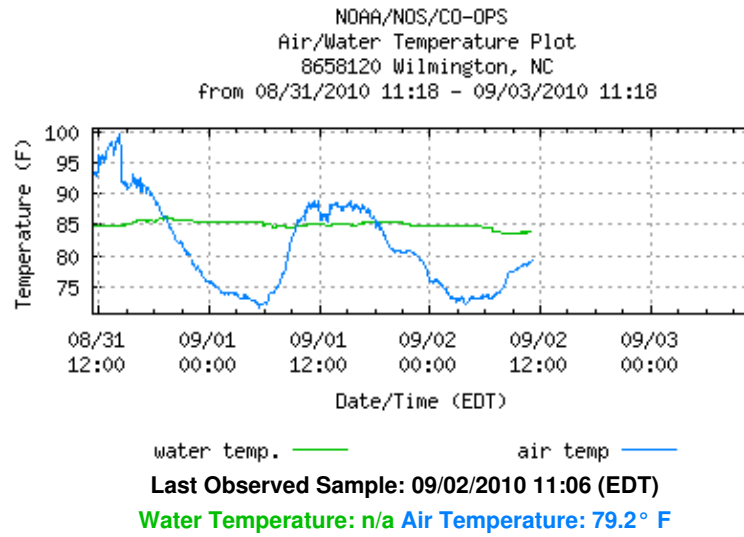
Wilmington, NC - [Return to List](#)



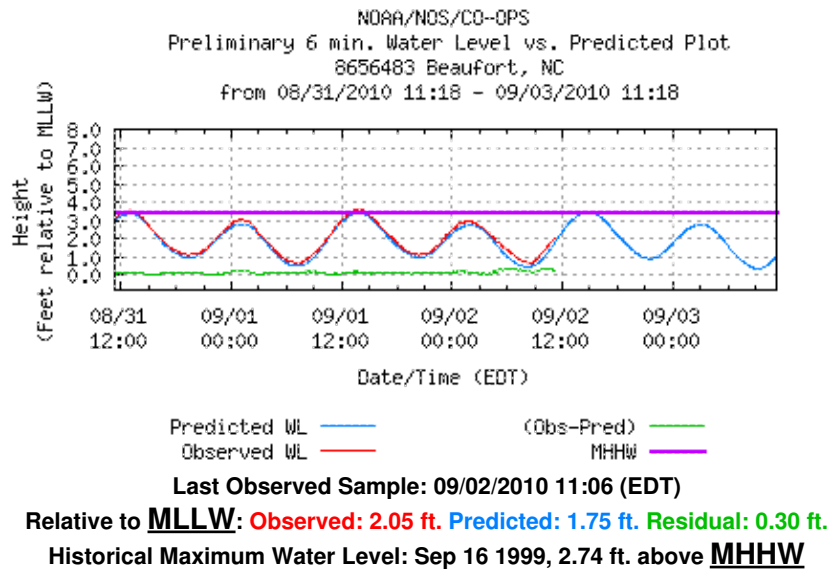
Last Observed Sample: 09/02/2010 11:06 (EDT)

Barometric Pressure: 1013.9 mb

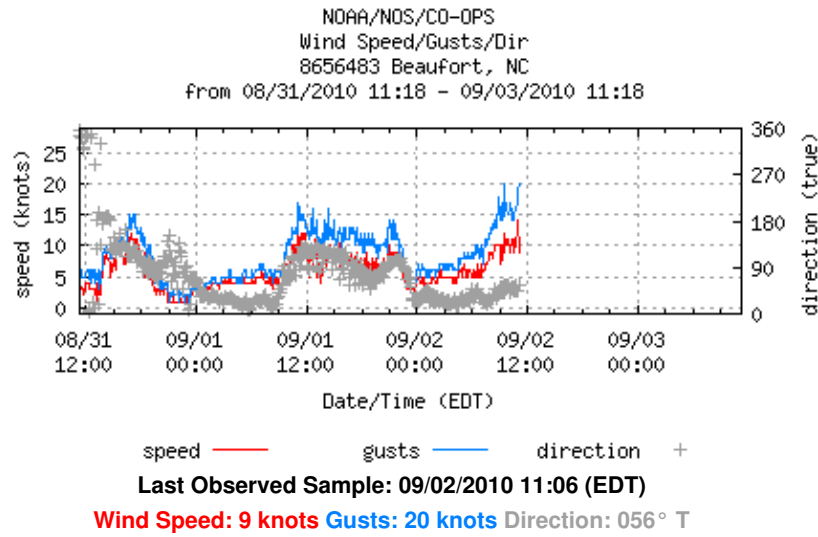
Wilmington, NC - [Return to List](#)



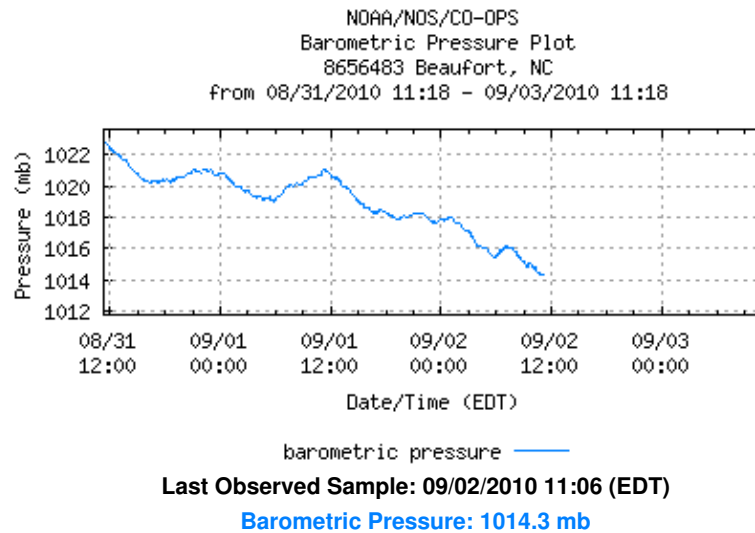
Beaufort, NC - [Return to List](#)



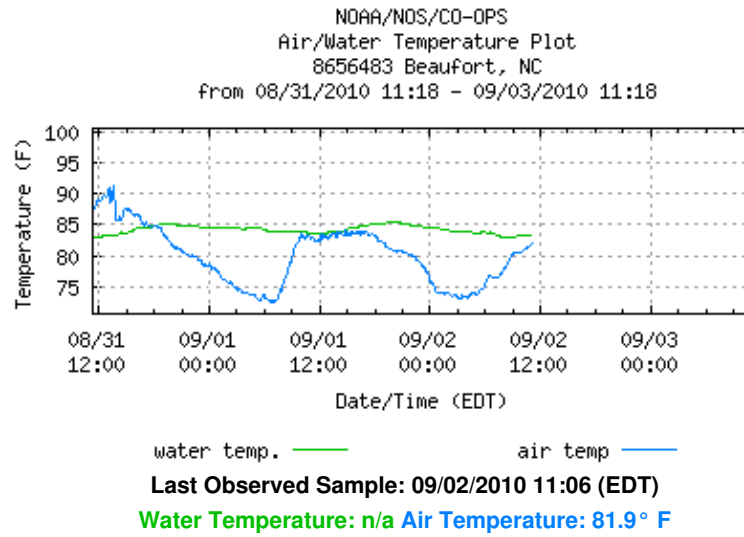
Beaufort, NC - [Return to List](#)



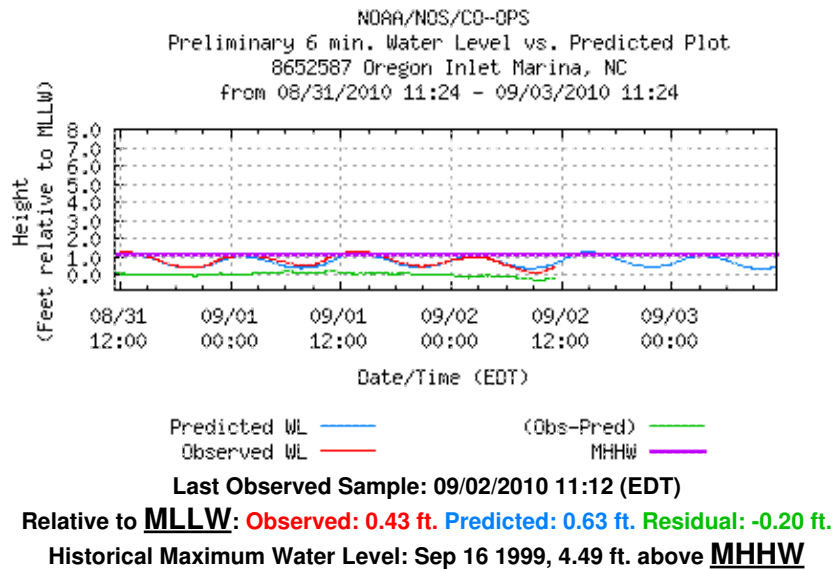
Beaufort, NC - [Return to List](#)



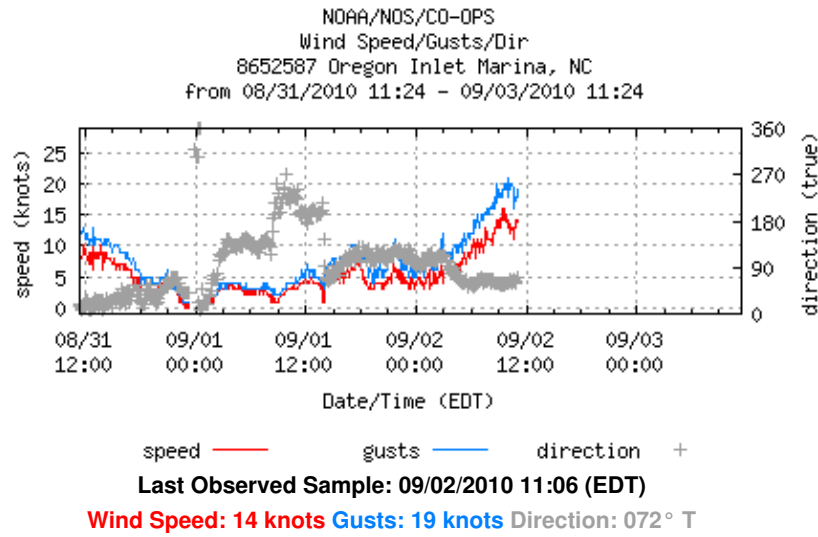
Beaufort, NC - [Return to List](#)



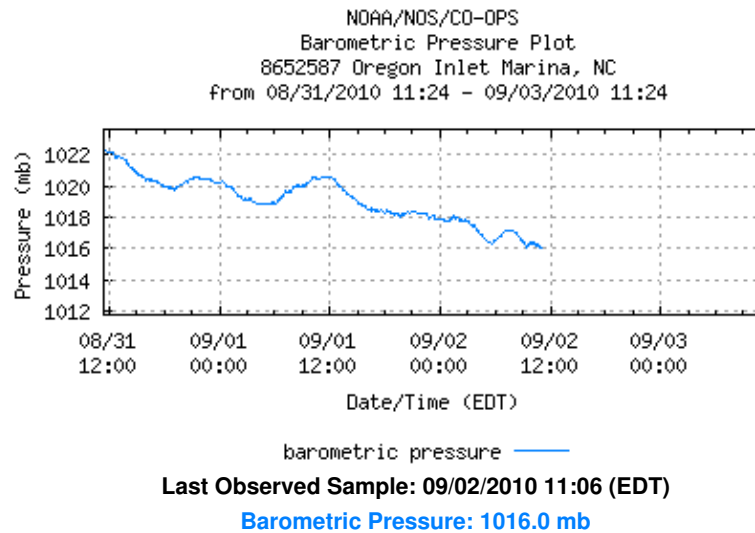
Oregon Inlet Marina, NC - [Return to List](#)



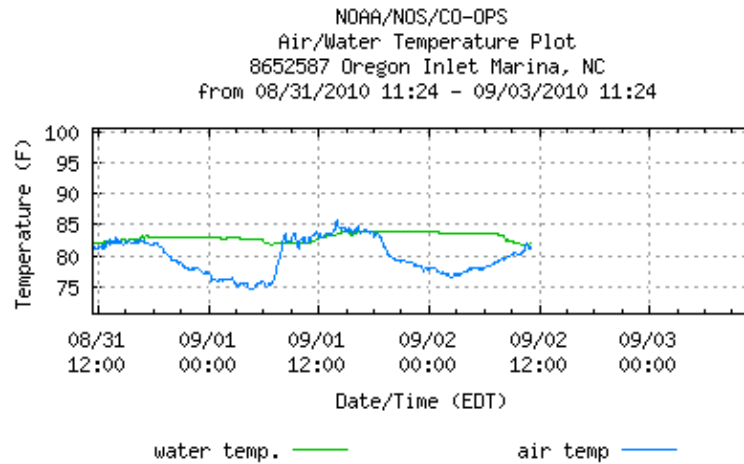
Oregon Inlet Marina, NC - [Return to List](#)



Oregon Inlet Marina, NC - [Return to List](#)



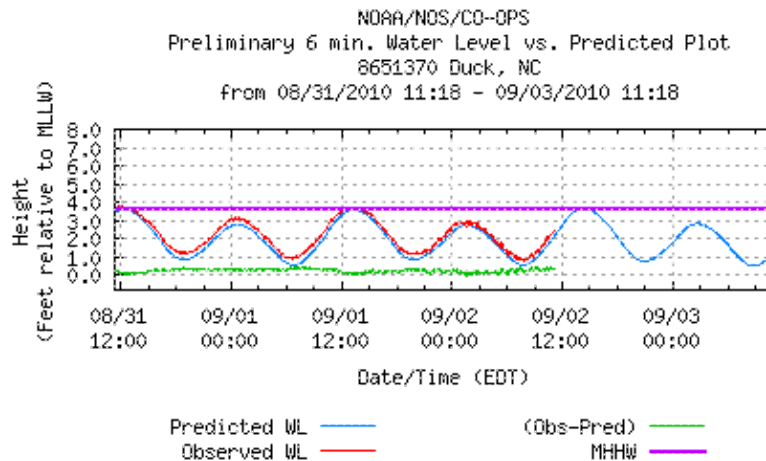
Oregon Inlet Marina, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Water Temperature: 81.9° F Air Temperature: 81.5° F

Duck, NC - [Return to List](#)

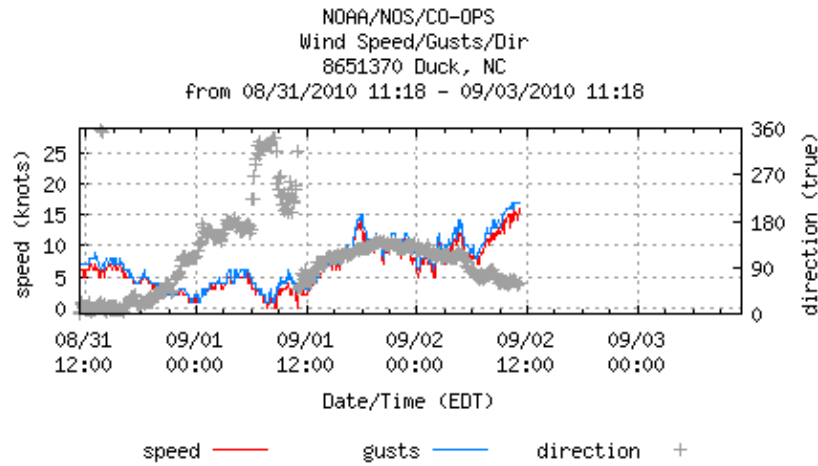


Last Observed Sample: 09/02/2010 11:06 (EDT)

Relative to **MLLW**: Observed: 2.44 ft. Predicted: 2.13 ft. Residual: 0.31 ft.

Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above **MHHW**

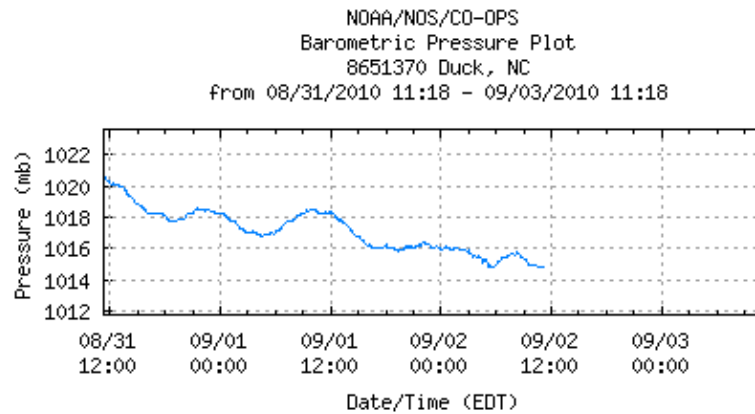
Duck, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Wind Speed: 16 knots Gusts: 17 knots Direction: 058° T

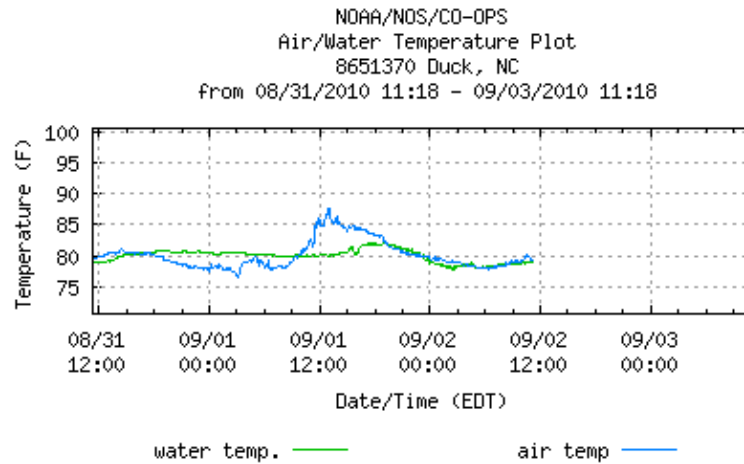
Duck, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Barometric Pressure: 1014.9 mb

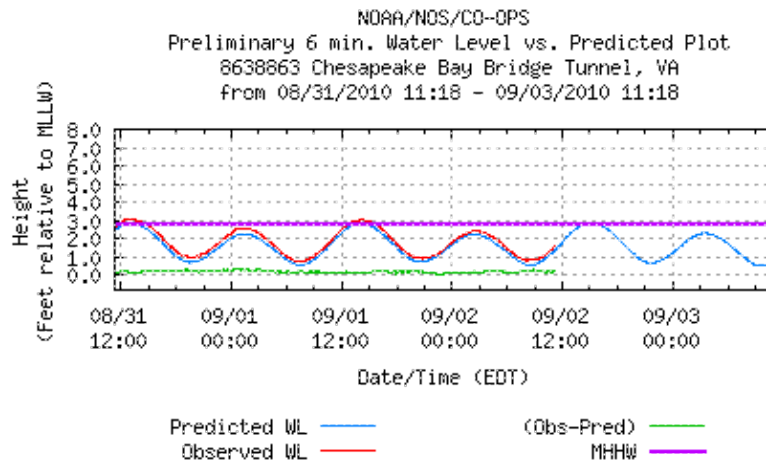
Duck, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Water Temperature: 79.0° F Air Temperature: 79.3° F

Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)

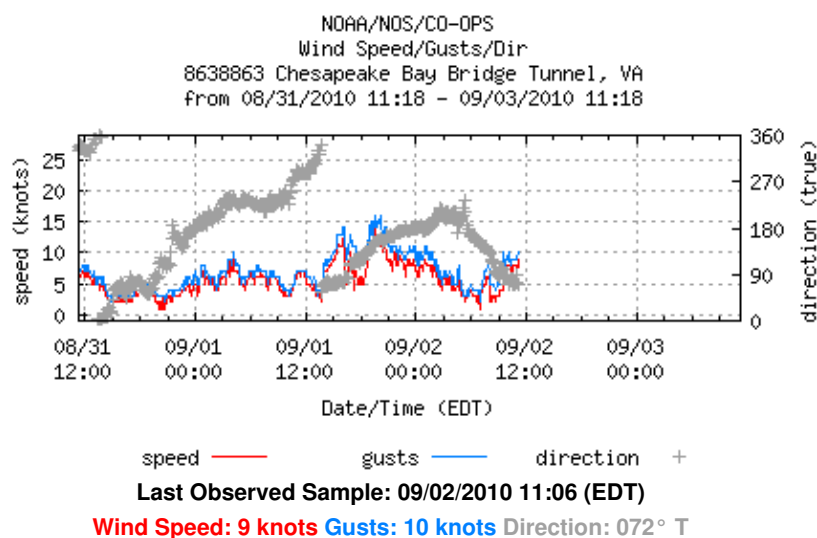


Last Observed Sample: 09/02/2010 11:06 (EDT)

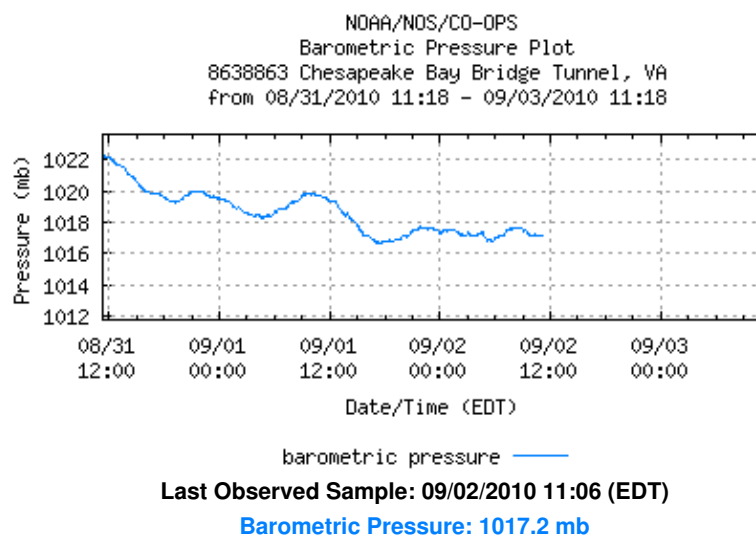
Relative to **MLLW**: Observed: 1.59 ft. Predicted: 1.35 ft. Residual: 0.24 ft.

Historical Maximum Water Level: Feb 5 1998, 3.68 ft. above **MHHW**

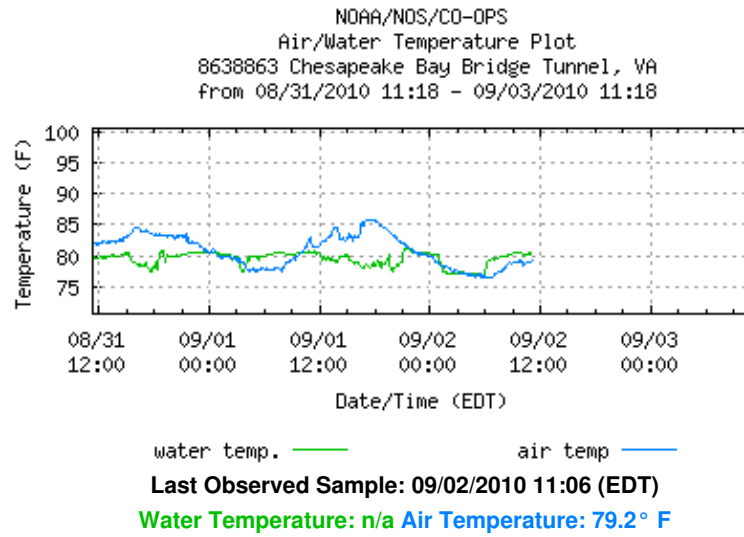
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



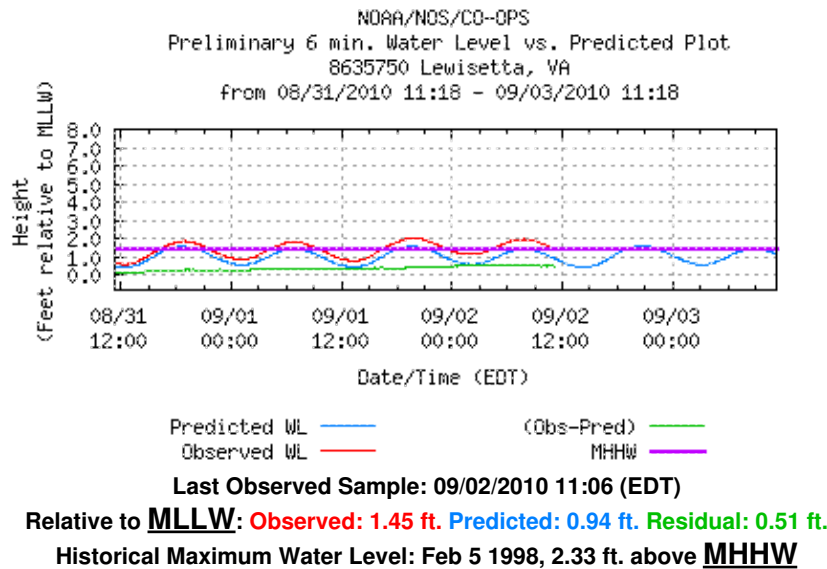
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



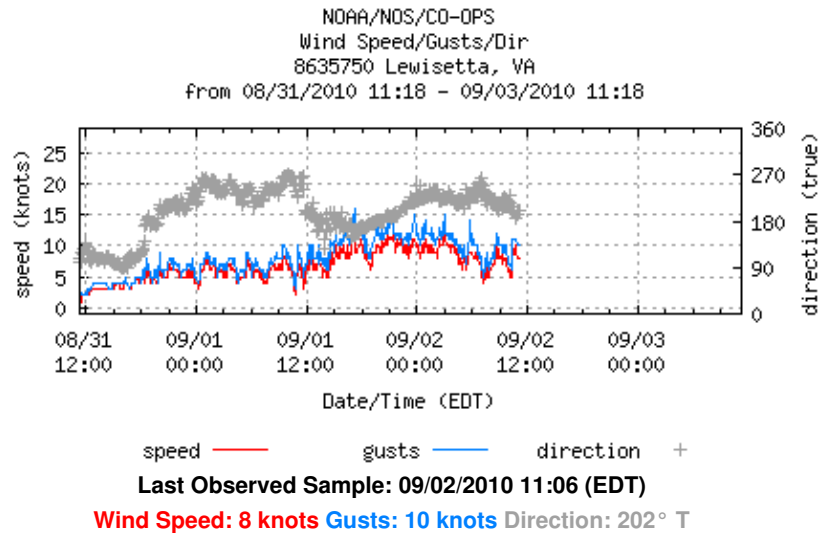
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



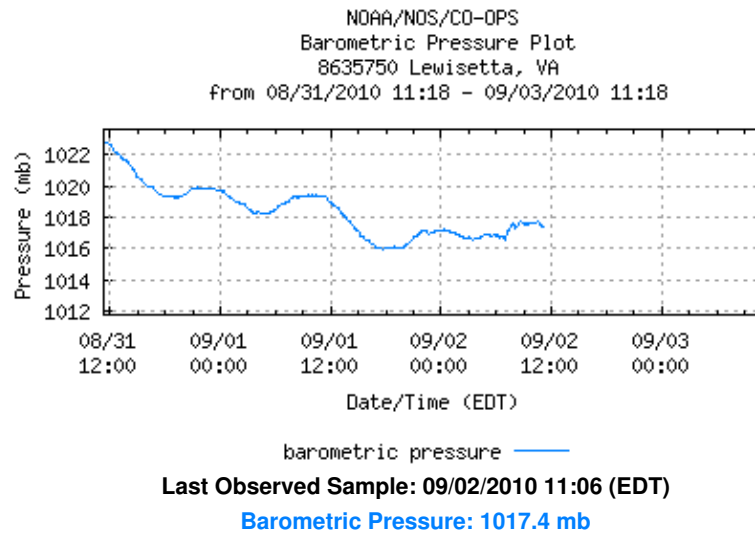
Lewisetta, VA - [Return to List](#)



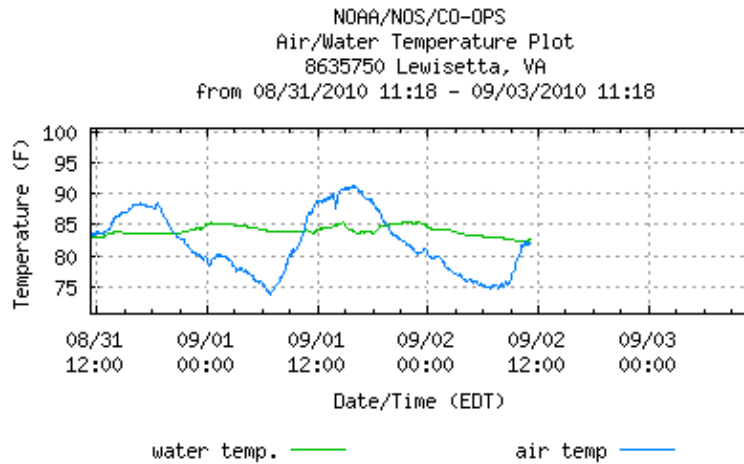
Lewisetta, VA - [Return to List](#)



Lewisetta, VA - [Return to List](#)



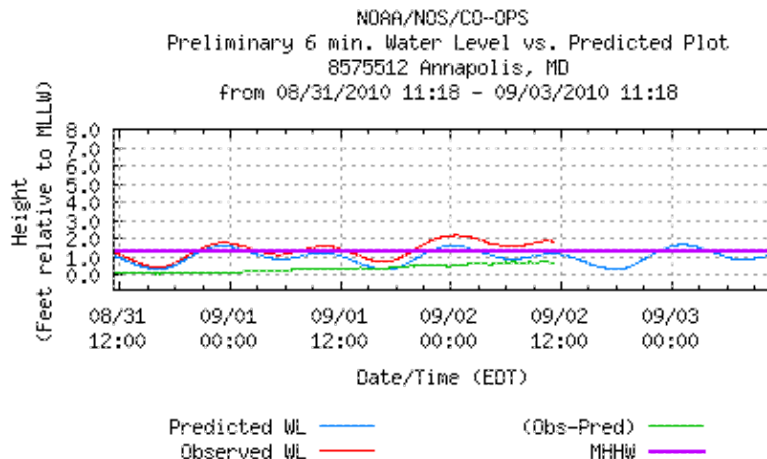
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Water Temperature: 82.7° F Air Temperature: 82.1° F

Annapolis, MD - [Return to List](#)

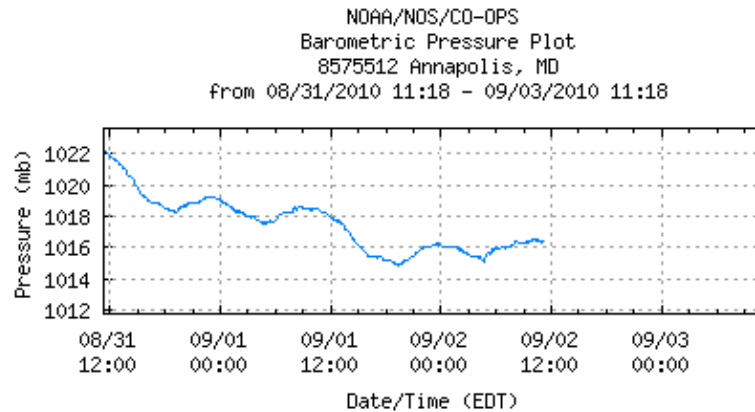


Last Observed Sample: 09/02/2010 11:06 (EDT)

Relative to **MLLW**: Observed: 1.87 ft. Predicted: 1.16 ft. Residual: 0.71 ft.

Historical Maximum Water Level: Aug 23 1933, 4.74 ft. above **MHHW**

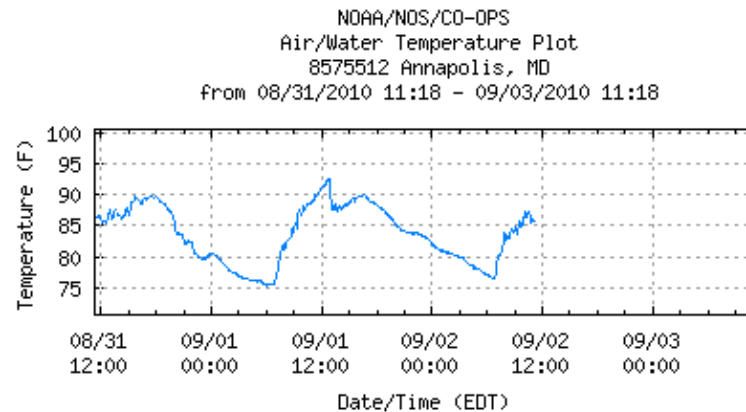
Annapolis, MD - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Barometric Pressure: 1016.4 mb

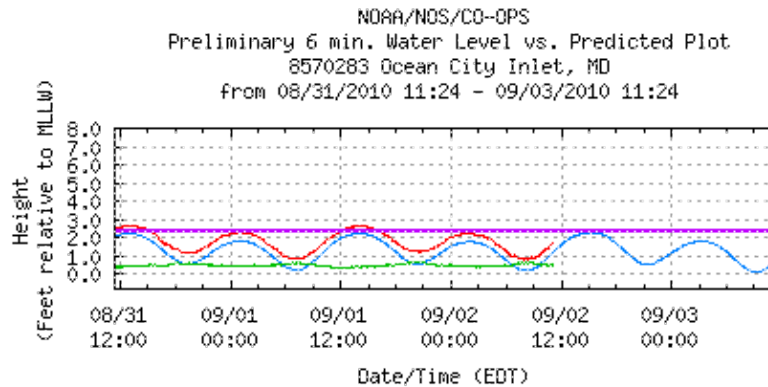
Annapolis, MD - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Water Temperature: n/a Air Temperature: 85.6° F

Ocean City Inlet, MD - [Return to List](#)



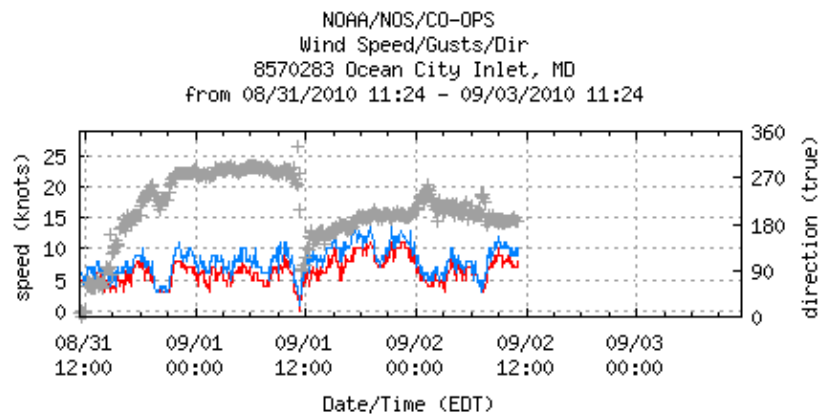
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 09/02/2010 11:06 (EDT)

Relative to **MLLW**: **Observed: 1.70 ft. Predicted: 1.22 ft. Residual: 0.48 ft.**

Historical Maximum Water Level: Feb 5 1998, 3.6 ft. above **MHHW**

Ocean City Inlet, MD - [Return to List](#)

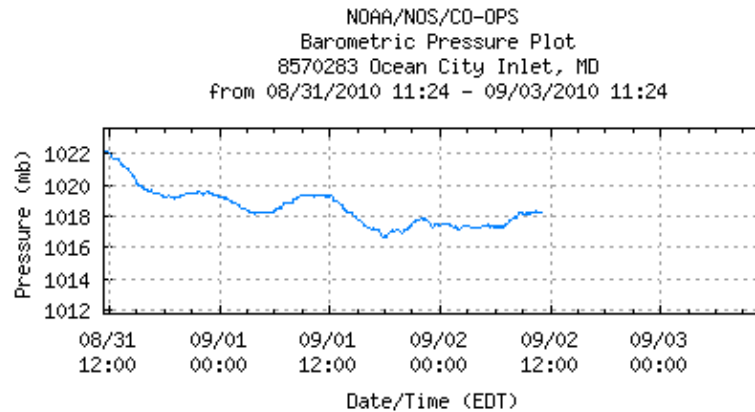


speed — gusts — direction +

Last Observed Sample: 09/02/2010 11:06 (EDT)

Wind Speed: 8 knots Gusts: 10 knots Direction: 186° T

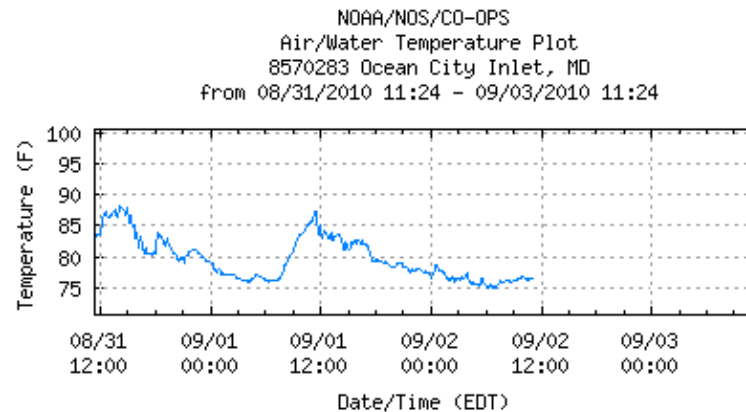
Ocean City Inlet, MD - [Return to List](#)



Last Observed Sample: 09/02/2010 11:06 (EDT)

Barometric Pressure: 1018.2 mb

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Last Observed Sample: 09/02/2010 11:06 (EDT)

Water Temperature: n/a Air Temperature: 76.6° F

Hurricane EARL QuickLook, POSTED 11:30 EDT 09/02/2010

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce